BRUHAT BANGALORE MAHANAGARA PALIKE

Yelahanka Zone, Kodigehalli Sub Division

Name of Work:-Development of Lawn in CQAL Layout Park in Ward No 08

Ward No.08 For Rs. **500000.00**

Sl No	Description Of Work	Unit	qty	Rate	Amount
	Total Area 3596.87 sqmt				
	Landscape area 1237 Sqmt				
1	**Hedges**:-				
	a) Developing hedges by digging trenches of size 0.45x0.45m filing 50% of the trench with excavted top soil and remaining (0.0224 Cum) (i.e.in the proportion of 1:2:3) Exclusive of cost plants and inclusive ingredients	Rmt	650	195.00	126750.00
	b) Cost of plants (7 plants per rmt)	Rmt	650	210.00	136500.00
2	**Supplying & Planting of specimen plants**				
	a) Digging pits size 0.75mx0.75mx0.75 filling up to 50% the pits with top excavated soil and remainging 50% with sand, Fym, Red earth (0,021 Cum) (ie in the proportion of 1:2:3) and **Ficus Ponda** (90cm-150cm ht) including cost of plant, materials, transporation and handling & planting cost)	Each	37	2500.00	92500.00
	b) Diging pits size 0.75mx0.75mx0.75 filling up to 50% the pits with top excavated soil and remainging 50% with sand, Fym, Red earth (0,021 Cum) (ie in the proportion of 1:2:3) and **Ficus Benamina Black** (90cm-150cm ht) including cost of plant, materials, transporation and handling & planting cost)	Each	36	2500.00	90000.00
	Total Rs:-				445750.00
	Add GSt 12%				53490.00
	Miscellaneous				760.00
	Grand Total Rs;-				**500000.00**

CERTIFICATE :-

Certified that I have inspected the area and prepared the estimate.
Certified that the work proposed in this estimate is not included in any other scheme
Estimate is prepared based on the BBMP Horticulture SR 2018-19.
Gst/Govt Applicable Charges based on Government Order

Junior Engineer
Ward No.08

Assistant Executive Engineer
Kodigehalli Sub-Division
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER
BYATARAYANAPURA DIVISION
BRUHAT BANGALORE MAHANAGARA PALIKE

Executive Engineer
Byatarayanapura Division
BBMP, Bangalore

BRUHAT BANGALORE MAHANAGARA PALIKE

Yelahanka Zone, Kodigehalli Sub Division

Name of Work:-Detailed Sub Estime for Providing Patheway Lighting to CQAL Layput Park in Ward No 08

Budget Head :

Ward No.08 Estimate No:- For Rs. **300000.00**

Sl No	SR Page &	Description Of Work	Unit	qty	Rate	Amount
1	13/4.2.1	Fabricating, supplying and erection of ...Mtrs long hot dip **Galvanized Octagonal pole** with BSEN 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/sec for .....Mtrs pole in single section and single joint welded as per IS 9595/IS 10178AWS having dimensions bottom .....mm, top....mm with 3mm thick, suitable base plate and 4Nos of long J bolts along with template and the pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153 etc., (excluding foundation) as per drawing appended.3 meters - Top 70mm and bottom 130mm dia	Nos	11	5360.00	58960.00
2	66/12.7.2	Supply of LED pole mounting type post top lantern with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/ clear glass material, delivering superior light output.Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in- house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Post Top Lantern with 35 watts		11	6400.00	70400.00

3	40/6.4.4	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm	Mtrs	230	150.00	34500.00
4	41/6.5	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct.6 sqmm to 16 sqmm	Mtrs	230	11.88	2732.40
5	41/6.6.1	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7)In soil (ordinary)	Mtrs	150	76.00	11400.00
6	5/2.3.2	Wiring for lighting/power circuit using one of **FRLS** PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments.1.5 sqmm	Mtrs	80	20.50	1640.00
7	5/2.3.6	10 sqmm	Mtr.	8	115.00	920.00
8	pwd sr 14-15	Providing Rcc Pole pedstal of Size 0.3x0.3x0.8 Mtrs Including digging of pit, tor steel, anchoring bolts nuts ,templates ,Centring,1;4;8base concrete,1;2;4pedestal concrete and etc coplete as per the data sheet enclosed	Nos	11	1695.00	18645.00
9	40/6.1	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	No	2	2999.70	5999.40
10	30/5.42.2	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete.16SWG	Sqcms	70000	0.35	24500.00
11	30/5.41.1	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.40x40x6mm	Nos	16	255.00	4080.00

	26/5.13.4	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.100 to 125Amps	Nos	2	7200.00	14400.00
13	27/5.17.5	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 40 Amps DP	Nos	4	1336.00	5344.00
14	14.1	Supplying and Fixing of. mm dia class A GI pipe bracket up to 2 Mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires.Using 32mm dia G.I.Pipe	Nos	7	835.00	5845.00
15	32/5.48	Supplying and fixing Microprocessor Based Astronomical timer Switch with using necessary bolts, nuts and washers.	Each	2	4030.00	8060.00
		Total Rs				267425.80
		Add GSt 12%				32091.10
		Mislenious				483.10
		Grand Total Rs				**300000.00**

CERTIFICATE :-

1. The place was inspected and the work is essential.
2. The provision made in the estimate are adequate and necessary and the work comes in the BBMP limit and is legitimate Charges on the BBMP funds.
3. The estimate is based on KPWD (Ele) S.R.2019-20 , and Approved Rates.

Junior Engineer
Ward no 8

Asst. Exe Engineer
Kodigehalli sub division
Bruhat Bangalore Mahanagara Palike

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

EXECUTIVE ENGINEER
BYATRAYANAPURA DIVISION
BRUHAT BANGALORE MAHANAGARA PALIKE

Executive Engineer
Bytarayanapura Division,
BBMP, Bangalore.

b	Cost of the Corms Bulbs (10 per Sqm) (including Transportation and Handling Charges)	Sqm		200.00	
10	**Hedges**				
a	Developing hedges by digging trenches of size 0.45mx0.45m. filling 50% of the trench with excavated top soil and remaining 50% with the mixture of sand (0.0112 Cum), FYM (0.0224Cum) (i.e. in the proportion of 1:2:3) Exclusive of cost plants and inclusive ingredients.	Rmt		195.00	
b	Cost of plants [7 Plant per Rmt]	Rmt		210.00	
11	**Mound Formation:** Providing and forming mound using red earth by filling, spreading and leveling to the required grade s per design, (including scraping and removing top layer of soil,removing unwanted debris, grass, along with excavated earth,lead lift, design cost)	Cum		600.00	
12	**Rockery:** Developing rockery 3.00 Cum (inclusive of voids) by placing natural rocks in asthetic manner. Spreading of mixture of sand FYM in the proportion of 1:1 and planting with suitable plants (inclusive of cost of plants and ingredients imedia [1:2:3 sand : red earth : FYM])	Rmt		686.93	
13	**DEVELOPMENT OF LAWN**				
	SCRAPING AND REMOVING TOP SOIL				
a	Cleaning the site by scraping and removing top layer of soil, removing unwanted debris, grass, along with excavated earth to a distance of 500m from the spot, including lead, lift loading and unloading charges (1x1x0.15m)	Sqm		69.04	
	1st DIGGING FOR LAWN				
b	Earthwork digging including removing weeds, debris if any and breaking of clumps watering etc., to a depth of	Sqm		97.16	
	2nd DIGGING FOR LAWN				
c	Digging for second time and removing weeds if any miner leveling to a depth of 0.45m	Sqm		48.58	
	Soil Filling for Lawn				
d	Supply and stocking good quality red earth etc., for filling the top layer to a depth of 0.15m (1x1x0.15)	Sqm		65.81	
e	Providing Sand, FYM and Red earth in the ratio of 1:3:6 and spreading to a depth of 7.5 cm at the required site				
	Sand (0.075 Cu.m Sq.m) Rs. 10.87	Sqm		53.80	
	FYM (0.0225 Cu.m/ Sq.m) Rs. 23.19				
	Red earth (0.045 Cu.m/Sq.m) Rs. 19.74				

Deputy Director (Horticulture)
Bruhat Bangalore Mahanagara Palike

36	Digging pits size 0.75m x 0.75m x 0.75 filling up to 50% the pits with top excavated soil and remaining 50% with sand, Fym, Red earth (0.021 Cum) (i.e. in the proportion of 1:2:3) and planting of **Ravenala madagascariensis 90 to 120cm)**Including cost of plant, materials, transporation and handling & planting Cost)	Each		800.00	

General terms & conditions

1 All the above said rates are inclusive of all Taxes and all other Statutory Payments levied under the existing/ amendement / enacted laws during the period of this contract and the client shall perform such duties in regard to the deduction of such tax may lawfully imposed.

2 It is the prime responsibility of the approved Tenderer/Agency to take precautionary measures in order to safeguard the deployed workers. During the time of work any accident, injuries or death to the workers. The approved Contractor/Aagency is solely responsible.

3 In case of defaults, the concern officer may consider termination of contract and penalty should be imposed.

Commissioner
BRUHATH BANGALORE MAHANAGARA PALIKE

Deputy Director (Horticulture) * Bruhat Bangalore Mahanagara Palike *

9	Digging pits size 0.75m x 0.75m x 0.75 filling up to 50% the pits with top excavated soil and remaining 50% with sand, Fym, Red earth (0,021 Cum) (i.e. in the proportion of 1:2:3) and planting of **Ficus Benjimina Prestige** (90cm - 150cm ht) / **Ficus Benjimina starlight**(90cm - 150cm ht) / **Ficus Benjimina Black**(90cm - 150cmm ht) / **Ficus Nuda / mini lucelli** (90cm - 150cm ht) / **Ficus Panda** (90cm - 150cmm ht) ht) **Ficus traingularis** Including cost of plant, materials, transporation and handling & planting Cost)	Each		2500.00	
10	Digging pits size 0.75m x 0.75m x 0.75 filling up to 50% the pits with top excavated soil and remaining 50% with sand, Fym, Red earth (0,021 Cum) (i.e. in the proportion of 1:2:3) and planting of **Yucca Species silver / Filimentosa Marginata (Golden)** (90cm - 150cm ht) Including cost of plant, materials, transporation and handling & planting Cost)	Each		1500.00	
11	Digging pits size 0.75m x 0.75m x 0.75 filling up to 50% the pits with top excavated soil and remaining 50% with sand, Fym, Red earth (0,021 Cum) (i.e. in the proportion of 1:2:3) and planting of **Nolina recurvata (Elephant foot)**(90cm - 150cm ht) Including cost of plant, materials, transporation and handling & planting Cost)	Each		3000.00	
12	Digging pits size 0.75m x 0.75m x 0.75 filling up to 50% the pits with top excavated soil and remaining 50% with sand, Fym, Red earth (0,021 Cum) (i.e. in the proportion of 1:2:3) and planting of **Plumeria Alba** / Rubra (150cm - 240cm ht) Pulmeria Rubra (150cm - 240cm ht) Including cost of plant, materials, transporation and handling & planting Cost)	Each		3000.00	
13	Digging pits size 0.75m x 0.75m x 0.75 filling up to 50% the pits with top excavated soil and remaining 50% with sand, Fym, Red earth (0,021 Cum) (i.e. in the proportion of 1:2:3) and planting of **Plumeria Pudica** (150cm - 240cm ht) Including cost of plant, materials, transporation and handling & planting Cost)	Each		1000.00	
14	Digging pits size 0.75m x 0.75m x 0.75 filling up to 50% the pits with top excavated soil and remaining 50% with sand, Fym, Red earth (0,021 Cum) (i.e. in the proportion of 1:2:3) and planting of **Cyperus Involucratus** (Umbrella Palm) Including cost of plant, materials, transporation and handling & planting Cost)	Each		500.00	

Deputy Director (Horticulture)
Bruhat Bangalore Mahanagara Palike

Sl. No.	Description	Unit	Rate Rs.	Ps.
5.47	Supplying and fixing Microprocessor based Electronic timer (without contactor, Din Mounting using necessary bolts, nuts and washers etc.,.) 3-120sec setting.	Each	1925.00	
5.48	Supplying and fixing Microprocessor Based Astronomical timer Switch with using necessary bolts, nuts and washers.	Each	4030.00	
5.49	Supplying and fixing of solar lux level street light control switch single phase including suitable capacity contactor			
5.49.1	3 KW	Each	8400.00	
5.49.2	5 KW	Each	8800.00	
5.49.3	8 KW	Each	10000.00	
5.50	Supplying and fixing of solar lux level street light control switch three phase including suitable capacity contactor			
5.50.1	5 KW	Each	10000.00	
5.50.2	8 KW	Each	10900.00	
5.50.3	12 KW	Each	13840.00	
5.51	Supply and fixing of fully Enclosed Automatic Transfer Switch (ATS) Pre-wired with Flexible Settings and seamless transfer between two power sources. The enclosure made of MS Power coated of necessary size. The switch comprising of EB/DG-Priority Source Selection,.Adjustable Time Delay(0.1sec to 3 hours),.Double-Break Contact System offering High Short-time Withstand (Icw),.with necessary Terminal Shrouds, Phase Barriers & Source Separator,. Protections for UV/OV, Phase Sequence, Single Phasing, Frequency variation. There should be sufficient space for cable termination. Three Phase 415 Volts			
5.51.1	125A	Each	69000.00	
5.51.2	160A	Each	75000.00	
5.51.3	200A	Each	76500.00	
5.51.4	250A	Each	95000.00	
5.52	Supply, Installation, Testing & Commissioning of ACCL-Automatic Changeover and Current Limiter is DIN–Rail mounted in Polycarbonate housing. When the main supply fails and stand by Generator supply is on, it automatically connects the DG power and monitor the load. When ever the load current exceeds preset limit, power must be automatically switched off for 8/10/12 seconds, and then automatically restore when the load current receds. It is Micro-processor based, pre-trip LED indication. Operating range *190V – 270V, 50Hz single phase power supply, Conforming to IEC 60947-6, IEC 60947-3. Extremely energy efficient by consuming negligible power without heating. Minimum time* delay setting for mains transfer as added safety.			
5.52.1	ACCL SPN upto 20A DG Supply	Each	3200.00	
5.52.2	ACCL SPN 25 upto 63A DG Supply	Each	5200.00	

Sl. No.	Description	Unit	Rate Rs.	Ps.
14.0	Fixing Charges			
14.1	Supplying and Fixing of.....mm dia class A GI pipe bracket up to 2 Mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires.			
14.1.1	Using 25mm dia G.I.Pipe	Each	775.00	
14.1.2	Using 32mm dia G.I.Pipe	Each	835.00	
14.2	Supplying and Fixing.....mm dia class A GI pipe bracket up to 2.7 meters long terminated with a reducing collar of 40x25mm to which extra pipe of 175mm length is fixed for fixing MV/SV/MH/FTL street light fitting of all capacities on rail/RCC/wall/tubular pole, using suitable clamps, bolts, nuts and wiring using suitable capacity wires.			
14.2.1	Using 25mm dia G.I.Pipe	Each	972.00	
14.2.2	Using 32mm dia G.I.Pipe	Each	1052.00	
14.2.3	Using 40mm dia G.I.Pipe	Each	1212.00	
14.3	Supplying and Fixing 50mm class A GI pipe up to 4.5 Mtrs. long with a reducing collar of 50x40mm to which, an extension of 250 mm pipe is fixed for 125 or 250/400 watts MV / sodium vapour street light fitting, using suitable clamps, bolts ,nuts, and wiring using suitable capacity wires.	Each	2035.00	
14.4	Supplying and fixing telescopic M.S. bracket fabricated by using 0.5m length 4" dia telescopic M. S. pipe, with 2" dia 1.5m long M. S. bracket and are welded with suitable angle, using 6mm thick M. S. sheet, grip bolts & nuts, as required, suitable for 9 to 12 Mtrs. M. S. tubular pole, with necessary two coats of painting, with all other accessories.			
14.4.1	Single bracket 1.5 Mtr. Length	Each	1200.00	
14.4.2	Single bracket 2 Mtr. Length	Each	1557.00	
14.4.3	Double bracket 2x1.5 Mtr. Length	Each	1962.00	
14.4.4	Double bracket 2x2 Mtr. Length	Each	2302.00	
14.5	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	Each	175.00	
14.6	Fixing charges of post top/ Gate/ Garden fitting /LED on the existing CI / GI or any other pipe using required size of reducer, wiring using suitable wires.	Each	154.00	
14.7	Fixing all types and all capacities of fluorescent / false ceiling / spot light / CFL / LED fittings indoor on the wall / ceiling / rafters / girders using 23/0.0076" twin twisted PVC insulated wires, required Nos of round blocks and clamps.			
14.7.1	On wall / ceiling / Rafter / Girders	Each	110.00	
14.7.2	Using necessary length of G.I. chain	Each	234.00	

Sl. No.	Description	Unit	Rate Rs. Ps.
5.12.1	63 Amps	Each	5300.00
5.12.2	100 Amps	Each	7000.00
5.12.3	125 Amps	Each	7300.00
5.12.4	200 Amps	Each	13700.00
5.12.5	250 Amps	Each	20400.00
5.12.6	400 Amps	Each	23600.00
5.12.7	630 Amps	Each	33300.00
5.12.8	800 Amps	Each	49000.00
5.13	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring, etc., complete with AC-3 Rating and as per IS-13947.		
5.13.1	25 Amps	Each	1263.00
5.13.2	40 Amps	Each	1840.00
5.13.3	60 to 70Amps	Each	4200.00
5.13.4	100 to 125Amps	Each	7200.00
5.13.5	130 Amps	Each	9200.00
5.13.6	160 Amps	Each	14300.00
5.13.7	200 Amps	Each	16700.00
5.13.8	255 Amps	Each	19000.00
5.13.9	330 Amps	Each	32300.00
5.13.10	360 Amps	Each	33000.00
5.13.11	400 Amps	Each	39200.00
5.13.12	500 Amps	Each	49200.00
5.13.13	600 Amps	Each	52000.00
5.13.14	700 Amps	Each	70800.00
5.13.15	800 Amps	Each	72000.00
5.14	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics)		
	THREE POLE		
5.14.1	100Amps 25kA.	Each	4530.00
5.14.2	125 Amps 25kA.	Each	6200.00
5.14.3	160Amps 25kA.	Each	6500.00
5.14.4	200Amps 35kA.	Each	10700.00
5.14.5	250Amps 35kA.	Each	15350.00
5.14.6	400Amps 50kA.	Each	23100.00

Sl. No.	Description	Unit	Rate Rs.	Pa.
	FOUR POLE			
5.14.7	100Amps 25kA.	Each	6400.00	
5.14.8	125 Amps 25kA.	Each	8250.00	
5.14.9	160Amps 25kA.	Each	8500.00	
5.14.10	200Amps 35kA.	Each	16100.00	
5.14.11	250Amps 35kA.	Each	17100.00	
5.14.12	320-400Amps 50kA.	Each	26000.00	
5.14.13	400-500Amps 50kA.	Each	27200.00	
5.14.14	500-630Amps 50kA.	Each	28500.00	
5.14.15	700-800Amps 50kA.	Each	40300.00	
5.15	Supplying and fixing of Shunt trip suitable for MCCB.CBCT.	Each	1400.00	
5.16	Supplying and fixing regular MCCB distribution Panel confirming to IS 8828, on wall / wood board / flush mounting using required clamps, bolts, nuts, etc., with provision for fixing of suitable type capacity MCCB's as an incomer for 3 phase Double door with necessary bus bar completely wired to use on 440Volts 3phase 4 wire powder coated painting etc., complete with a provision for fixing of single/ three phase suitable capacity MCCB/MCB's as outgoings confirming to IS8828.			
5.16.1	4Way	Each	7000.00	
5.16.2	8Way	Each	8800.00	
5.16.3	12Way	Each	11400.00	
5.17	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.			
5.17.1	6-32Amps SP	Each	434.00	
5.17.2	40 Amps SP	Each	713.00	
5.17.3	50-63 Amps SP	Each	723.00	
5.17.4	6-32 Amps DP	Each	909.00	
5.17.5	40 Amps DP	Each	1336.00	
5.17.6	50-63 Amps DP	Each	1355.00	
5.17.7	6-32Amps TPN	Each	1715.00	
5.17.8	40 Amps TPN	Each	2374.00	
5.17.9	50-63Amps TPN		2397.00	
5.18	Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.			

Sl. No.

6.0	L.T. U
6.1	Supply conduc board long b propo comp etc., i speci wash holes
6.2	Supp of lit thick suita The 400 sha sho sail cou GI
6.3	Su co
6.3.1	25
6.3.2	25
6.3.3	40
6.3.4	5(
6.3.5	6
6.3.6	2
6.3.7	2
6.3.8	4
6.3.9	5
6.3.10	(
6.4	
6.4.1	
6.4.2	
6.4.3	
6.4.4	
6.4.5	
6.4.6	

Sl. No.	Description	Unit	Rate Rs.	Ps.
6.0	L.T. U.G. CABLES			
6.1	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	No	2999.70	
6.2	Supplying fixing and wiring earth electrode for grounding of lifts, transformers, DG sets etc. using 40mm dia 2.9mm thick 2.5 mtr long GI pipe with GI funnel with mesh and suitable size reducer fixed on the top of the earth electrode. The funnel should be enclosed in a CC chamber of 400x400x400mm with a cast iron cover. The earth electrode shall have staggered holes of 12mm dia and the electrode should be covered 150mm all-round with alternate layers of salt and charcoal from the bottom of the CC chamber. The connection from the electrode is to be established through GI strip using GI bolts and nuts.	No	4150.00	
6.3	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required.			
6.3.1	25x3mm GI strip	Mtr	75.00	
6.3.2	25x6mm GI strip	Mtr	115.00	
6.3.3	40x6mm GI strip	Mtr	160.00	
6.3.4	50x6mm GI strip	Mtr	195.00	
6.3.5	600x600x3mm GI Plate	Each	760.00	
6.3.6	25x3mm Copper strip	Mtr	505.00	
6.3.7	25x6mm Copper strip	Mtr	958.00	
6.3.8	40x6mm Copper strip	Mtr	1430.00	
6.3.9	50x6mm Copper strip	Mtr	1945.00	
6.3.10	600x600x3mm Copper plate	Each	6900.00	
6.4	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975			
6.4.1	2 core 10 sqmm	Mtr	95.00	
6.4.2	4 core 10 sqmm	Mtr	130.00	
6.4.3	2 core 16 sqmm	Mtr	120.00	
6.4.4	4 core 16 sqmm	Mtr	150.00	
6.4.5	3.5 core 25 sqmm	Mtr	180.00	
6.4.6	3.5 core 35 sqmm	Mtr	225.00	

Sl. No.	Description	Unit	Rate Rs.	Ps.
6.4.7	3.5 core 50 sqmm	Mtr	300.00	
6.4.8	3.5 core 70 sqmm	Mtr	360.00	
6.4.9	3.5 core 95 sqmm	Mtr	485.00	
6.4.10	3.5 core 120 sqmm	Mtr	600.00	
6.4.11	3.5 core 150 sqmm	Mtr	720.00	
6.4.12	3.5 core 185 sqmm	Mtr	895.00	
6.4.13	3.5 core 240 sqmm	Mtr	1130.00	
6.4.14	3.5 core 300 sqmm	Mtr	1380.00	
6.4.15	3.5 core 400 sqmm	Mtr	1780.00	
6.5	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.			
	In existing trench/duct.			
6.5.1	6 sqmm to 16 sqmm	Mtr	11.88	
6.5.2	25 sqmm to 75 sqmm	Mtr	15.50	
6.5.3	95 sqmm to150Sqmm	Mtr	21.00	
6.5.4	185sqmm to 240Sqmm	Mtr	35.00	
6.5.5	300sqmm to 400Sqmm	Mtr	32.00	
	On wall /Structure			
6.5.6	6 sqmm to 16 sqmm	Mtr	30.00	
6.5.7	25 sqmm to 75 sqmm	Mtr	35.00	
6.5.8	95 sqmm to 150Sqmm	Mtr	40.00	
6.5.9	185sqmm to 240Sqmm	Mtr	43.00	
6.5.10	300sqmm to 400Sqmm	Mtr	57.00	
6.6	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7)			
6.6.1	In soil (ordinary)	Mtr	76.00	
6.6.2	In soil (hard)	Mtr	102.00	
6.6.3	Cutting road surface	Mtr	82.00	
6.6.4	Asphalt cutting	Mtr	113.00	
6.6.5	C.C. cutting	Mtr	205.00	
6.7	Providing and filling sand in excavated trench to cover already laid UG cable to a depth of 150mm all-round the cable.	Mtr	100.00	
6.8	Providing and laying in position 100mm dia stone ware pipe in existing trench.	Mtr	215.00	
6.9	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV.			
6.9.1	40mm	Mtr	335.00	

Sl. No.	Description	Unit	Rate Rs.	Rate Ps.
	Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB . LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.			
12.7.1	LED Post Top Lantern with 25 watts	No	5600.00	
12.7.2	LED Post Top Lantern with 35 watts	No	6400.00	
	LED Street light.			
12.8	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.			

Sl. No.	Description	Unit	Rate Rs.	Rate Ps.
4.0	POLES & HIGH MAST			
4.1	Fabricating, supplying and erecting swaged tubular pole of height Mtr having three sections, and providing two coats of red oxide paint and finished with two coats of enamelled paint of approved quality and colour and M.S. base plate of suitable size welded at the bottom of the pole(as per IS) and 40mm dia GI / flexible PVC pipe of 1 mtr length fitted to the heavy gauge polycarbonate control box including 5way connector of size 167x125x82mm for 7.5M pole/200x160x98mm for remaining length of pole with front opening cover, with locking arrangements and suitable capacity MCB / DP switch. The pole shall be erected in cement concrete work (1:2:4) including excavation and refilling of planting depth of the pole to the ground level and the coping CC shall be up to 0.6M above ground level as per IS 2713 - 7.			
	Erection of heavy duty pole on Footpath / median			
4.1.1	9Mt (5Mt Hb,165.1mm dia 4.85mm thick x2M Hm, 139.7mm dia 4.50mm thick x 2M Ht,114.3mm dia 3.65mm thick) as per IS 410 SP 32	Each	13200.00	
4.1.2	10Mt (5Mt Hb,165.1mm dia 4.85mm thick x3M Hm, 139.7mm dia 4.50mm thick x 2M Ht,114.3mm dia 3.65mm thick) as per IS 410 SP 47	Each	16720.00	
4.2	Fabricating, supplying and erection of ...Mtrs long hot dip Galvanized Octagonal pole with BSEN 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/sec for .....Mtrs pole in single section and single joint welded as per IS 9595/IS 10178AWS having dimensions bottom .....mm, top....mm with 3mm thick, suitable base plate and 4Nos of ..... long J bolts along with template and the pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153 etc., (excluding foundation) as per drawing appended.			
4.2.1	3 meters - Top 70mm and bottom 130mm dia	Each	5360.00	
4.2.2	4 meters - Top 70mm and bottom 130mm dia	Each	6510.00	
4.2.3	5meters - Top 70mm and bottom 130mm dia	Each	7651.00	
4.2.4	6meters - Top 70mm and bottom 130mm dia	Each	9076.00	
4.2.5	7 meters - Top 70mm and bottom 130mm dia	Each	10930.00	
4.2.6	8 meters - Top 70mm and bottom 135mm dia	Each	12260.00	
4.2.7	9 meters - Top 70mm and bottom 155mm dia	Each	15064.00	
4.2.8	10 meters - Top 70mm and bottom 175mm dia	Each	15713.00	
4.2.9	11meters - Top 90mm and bottom 210mm dia	Each	20698.00	
4.2.10	12meters - Top 90mm and bottom 240mm dia	Each	24330.00	

Sl. No.	Description	Unit	Rate Rs.	Ps.
6.0	L.T. U.G. CABLES			
6.1	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	No	2999.70	
6.2	Supplying fixing and wiring earth electrode for grounding of lifts, transformers, DG sets etc. using 40mm dia 2.9mm thick 2.5 mtr long GI pipe with GI funnel with mesh and suitable size reducer fixed on the top of the earth electrode. The funnel should be enclosed in a CC chamber of 400x400x400mm with a cast iron cover. The earth electrode shall have staggered holes of 12mm dia and the electrode should be covered 150mm all-round with alternate layers of salt and charcoal from the bottom of the CC chamber. The connection from the electrode is to be established through GI strip using GI bolts and nuts.	No	4150.00	
6.3	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required.			
6.3.1	25x3mm GI strip	Mtr	75.00	
6.3.2	25x6mm GI strip	Mtr	115.00	
6.3.3	40x6mm GI strip	Mtr	160.00	
6.3.4	50x6mm GI strip	Mtr	195.00	
6.3.5	600x600x3mm GI Plate	Each	760.00	
6.3.6	25x3mm Copper strip	Mtr	505.00	
6.3.7	25x6mm Copper strip	Mtr	958.00	
6.3.8	40x6mm Copper strip	Mtr	1430.00	
6.3.9	50x6mm Copper strip	Mtr	1945.00	
6.3.10	600x600x3mm Copper plate	Each	6900.00	
6.4	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975			
6.4.1	2 core 10 sqmm	Mtr	95.00	
6.4.2	4 core 10 sqmm	Mtr	130.00	
6.4.3	2 core 16 sqmm	Mtr	120.00	
6.4.4	4 core 16 sqmm	Mtr	150.00	
6.4.5	3.5 core 25 sqmm	Mtr	180.00	
6.4.6	3.5 core 35 sqmm	Mtr	225.00	

Sl. No.	Description	Unit	Rate Rs.	Ps.
2.3.3	2.5 sqmm	Mtr.	32.00	
2.3.4	4 sqmm	Mtr.	45.00	
2.3.5	6 sqmm	Mtr.	70.00	
2.3.6	10 sqmm	Mtr.	115.00	
2.3.7	16 sqmm	Mtr.	188.00	
	The following additional tests are compulsory either to be conducted at works or independent lab with witness by inspecting authority.			
	Additional Tests for FRLS-Applicable Standard			
	Oxygen Index -IS 694-1990, Clause 16.8			
	Temperature Index -IS 694-1990, Clause 16.13			
	Smoke Density -IS 694-1990, Clause 16.14			
	Test for Halogen Acid Gas evaluation -IS 694-1990, Clause 16.12			
2.4	Supplying and drawing PVC insulated flexible copper wire of approved make.			
2.4.1	14/0.0040"	Mtr.	7.00	
2.4.2	23/0.0040"	Mtr.	9.00	
2.4.3	40/0.0040"	Mtr.	15.00	
2.4.4	14/0.0052"	Mtr.	8.50	
2.4.5	23/0.0052"	Mtr.	11.00	
2.4.6	30/0.0052"	Mtr.	14.00	
2.4.7	40/0.0052"	Mtr.	18.00	
2.4.8	70/0.0052"	Mtr.	25.00	
2.4.9	110/0.0052"	Mtr.	38.00	
2.5	Supplying and drawing Flexible Multicore Cable manufactured with electrolytic grade flexible copper with low conductor confirming to IS:8130-1984 and (Virgin) PVC insulation sheathed suitable for working voltage upto 1100Volts as per IS-694:1990			
2.5.1	2C X 1.5Sq.mm	Mtr.	40.00	
2.5.2	3C X 1.5Sq.mm	Mtr.	55.00	
2.5.3	4C X 1.5Sq.mm	Mtr.	65.00	
2.5.4	6C X 1.5Sq.mm	Mtr.	130.00	
2.5.5	8C X 1.5Sq.mm	Mtr.	170.00	
2.5.6	10C X 1.5Sq.mm	Mtr.	220.00	
2.5.7	2C X 2.5Sq.mm	Mtr.	70.00	
2.5.8	3C X 2.5Sq.mm	Mtr.	90.00	
2.5.9	4C X 2.5Sq.mm	Mtr.	115.00	
2.5.10	5C X 2.5Sq.mm	Mtr.	145.00	
2.5.11	6C X 2.5Sq.mm	Mtr.	230.00	

Sl. No.	Description	Unit	Rate Rs.	Ps.
5.39	Supplying, fixing and wiring Automatic Power Factor controller circuit unit fully, static units controlled by 14 stage microprocessor operation, relays LED display, self programming function for power stages and operating logic checking facility for healthy and efficient of each individual capacitor bank, measurement of network harmonics with indication when limit values are exceeded, Comprehensive displays with large, three phase LED display, Long term memory for settings, protection for over voltage, power factor correction fault and no voltage, to connect / disconnect banks, with automatic recognition or with standard programs.	Each	18000.00	
5.40	Supplying ..... amps rated 3phase with neutral bus bar using required capacity electrolytic aluminium strips covered with heat shrinkable coloured PVC sleeve, mounted on phenolic/FRP/DMC insulator which are mounted on powder coated 40x6mm M.S.flat frame work in existing panel board. The bus bar shall have suitable holes for termination of incoming and outgoing cables as per IS specification with necessary bolts, nuts and washers etc., complete.			
5.40.1	100Amps 4x30x6mm Aluminium Strips	Mtr	2050.00	
5.40.2	250Amps 4x30x10mm Aluminium Strips	Mtr	2850.00	
5.40.3	400Amps 4x50x10mm Aluminium Strips	Mtr	3700.00	
5.40.4	600Amps 4x75x10mm Aluminium Strips	Mtr	4680.00	
5.40.5	1000Amps double run of 4x60x10mm Aluminium Strips	Mtr	8800.00	
5.41	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.			
5.41.1	40x40x6mm	Mtr	255.00	
5.41.2	50x50x6mm	Mtr	330.00	
5.41.3	75x75x6mm	Mtr	460.00	
5.41.4	50x100x50x6mm C channel	Mtr	630.00	
5.41.5	75x150x75x6mm C channel	Mtr	770.00	
5.42	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete.			
5.42.1	14SWG	sq.cms	0.40	
5.42.2	16SWG	sq.cms	0.35	
5.42.3	18SWG	sq.cms	0.30	

Sl. No.	Description	Unit	Rate Rs.	Rate Ps.
2.0	**WIRES & CABLES**			
	Point wiring using Copper wire with switch.			
2.1	Supplying and wiring adopting loop system in existing PVC Conduit /casing capping using 2x1.5Sqmm (Phase & Neutral) & 1x1.0 sqmm (Earth wire) FRLS multi strand PVC insulated copper wire (confirming to IS-694 and latest amendments) with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block, complete for each outlet.			
2.1.1	Short point upto 3Mtr from tapping point to out let via switch	Point	200.00	
2.1.2	Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch	Point	275.00	
2.1.3	Long point above 6Mtr upto 10Mtr from tapping point to out let via switch	Point	400.00	
2.1.4	Two outlet in a row, above 3Mtr upto 6Mtr from tapping point to out let via switches.	Point	525.00	
2.1.5	Three outlet in a row, above 6Mts upto 10Mtr from tapping point to out let via switches	Point	750.00	
	Point wiring using Copper wire without switch.			
2.2	Supplying and wiring adopting loop system in existing PVC Conduit /casing capping casing capping using 2x1.5Sqmm (Phase & Neutral) & 1x1.0 sqmm (Earth wire) FRLS multi strand PVC insulated copper wire (confirming to IS-694 and latest amendments) without control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block, complete for each outlet.			
2.2.1	Short point upto 3Mtr from tapping point to out let via switch box	Point	160.00	
2.2.2	Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch box	Point	250.00	
2.2.3	Long point above 6Mtr upto 10Mtr from tapping point to out let via switch box	Point	375.00	
2.2.4	Two outlet in a row, above 3Mtr upto 6Mtr from tapping point to out let via switches	Point	475.00	
2.2.5	Three outlet in a row, above 6Mts upto 10Mtr from tapping point to out let via switches box	Point	675.00	
2.3	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694 confirming to latest amendments			
2.3.1	1 sqmm.	Mtr.	14.00	
2.3.2	1.5 sqmm	Mtr.	20.50	